

Name: _____ Date: _____ Period: _____

Unit 2 Test – Form B

45

Name the set of numbers to which each number belongs. (6 points)

-18	6	$\sqrt{80}$

True or False. If false, please provide a counterexample. (3 points)

_____ All integers are whole numbers.	_____ Some fractions are whole numbers.
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Identify the independent and dependent variables in the situation. Then find a reasonable domain and range. (4 points)

Situation: Tim mows lawns as a weekly job. He charges \$12 per lawn. Tim can mow as many as 7 lawns throughout the week.

Independent Variable:	Dependent Variable:
Domain:	Range:

The relationships in the table below is a function. Define your variables and write a function rule to describe the relationship. **(3 points)**

Number of weeks	Number of People
1	5
2	8
3	11
4	14

Define:

Function Rule:

Between what two consecutive integers is each square root? **NO CALCULATOR! (3 points)**

$$\sqrt{275}$$

$$\sqrt{30}$$

$$\sqrt{140}$$

Simplify each square root. **NO CALCULATOR! (3 points)**

$$\sqrt{196}$$

$$-\sqrt{225}$$

$$\sqrt{\frac{81}{121}}$$

Simplify each square root. Round your answer to the nearest hundredth. **(3 points)**

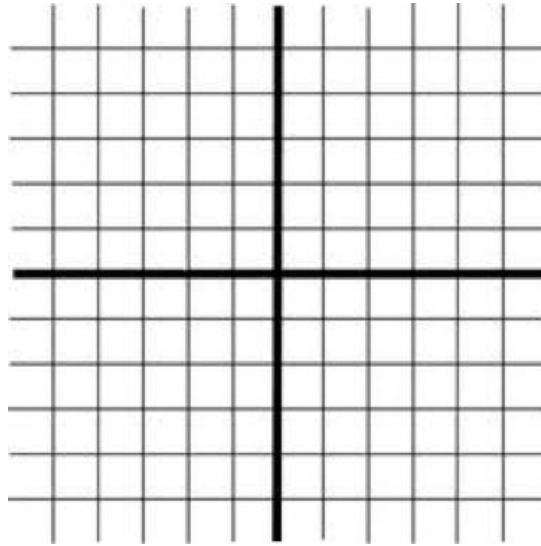
$$\sqrt{135}$$

$$\sqrt{73}$$

$$\sqrt{-8,356}$$

Plot the following points on the coordinate plane. (1 point)

A (3, -2) B (5, -2)



Calculate the distance. (4 points)

a. Label

b. Copy

c. Substitute

d. Answer

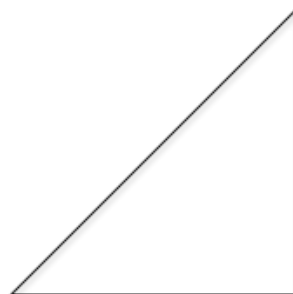
Who was Pythagoras? (1 point)

Who were Pythagoreans? What did they believe in? **(2 points)**

Describe the Pythagorean theorem. Write in complete sentences. **(3 points)**

A triangle has side lengths 11 in, 10 in, and 22 in. Is this a right triangle? **(2 points)**

Find the length of the missing side. **(2 points)**



Use the Pythagorean theorem to solve the following situation.

Situation. Mr. Green needs to clean the outside of the windows of his new house. He has a 15 ft ladder. He has placed it 7 feet from his house. How high up are his windows?
(4 points)

Step 1:

Step 2:

Step 3:

Step 4:

Math Honor Code: Please copy this statement below, then sign your name.

My signature certifies that this is my work. I did not give or receive help on it.

X _____